OKIFAX 1000
High Capacity Second Paper Feeder
MODEL UST-250
Maintenance

PREFACE

This Maintenance Manual is intended for the service personnel and describes the field maintenance methods for High Capacity Second Paper Feeder option of OKIFAX 1000.

Refer to the “Operator Guide” for the equipment handling and operation methods.

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1. OUTLINE

1.1 Functions

OKIFAX 1000 is mounted on top of this High Capacity Paper Feeder, and it supplies paper automatically through the operation of stepping motor (Hopping), which is driven by signals sent from OKIFAX 1000.
The main functions are the followings:

- Paper that can be used:

[Paper Type]
- Standard Paper: Xerox 4200 (20-lb)
- Special Paper:
- Cut Sheet Size: A4, Letter, Legal14

[Weight]
- 16-lb to 24-lb (60 to 90 g/m^2)

- Paper setting quantity: 250 sheets of paper weighing 64 g/m^2

1.2 External View and Component Names

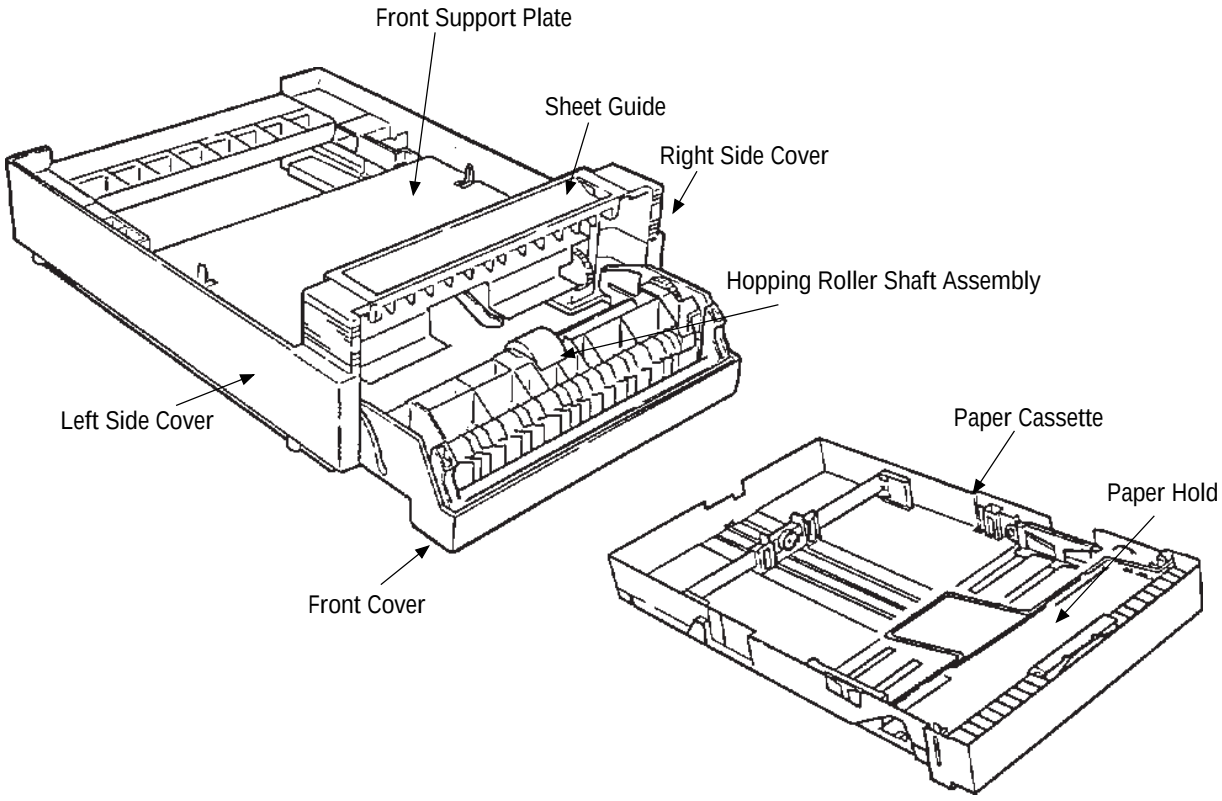


Fig. 1-1 External View and Component Names

2. MECHANISM DESCRIPTION

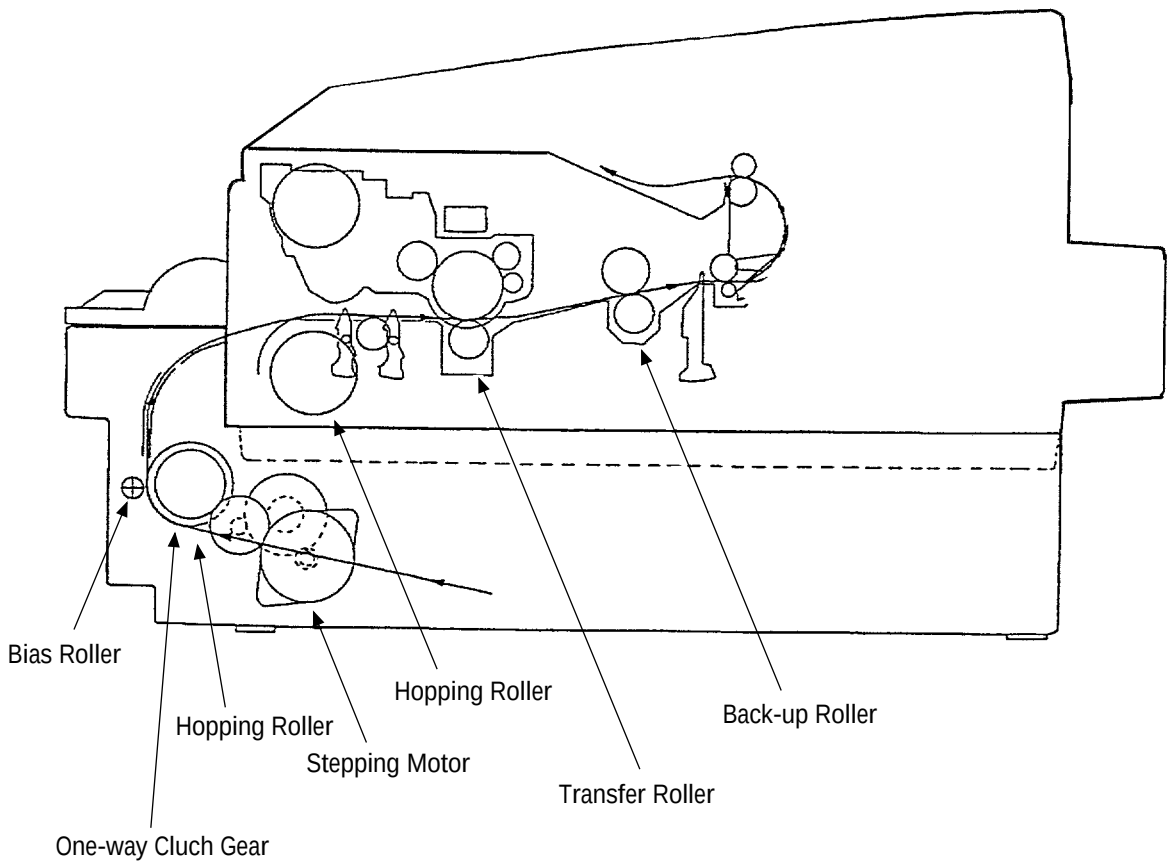
2.1 General Mechanism

The High Capacity Paper Feeder feeds the paper into the OKIFAX 1000 by receiving the signal from the OKIFAX 1000, which drives the stepping motor inside the High Capacity Paper Feeder, and this motion this conveyed to rotate the One-way clutch of the hopping shaft assembly. The paper is delivered from the hopper into the OKIFAX 1000 through the turning of the hopping shaft assembly.

Once delivered into the OKIFAX 1000, the paper is then controlled and fed through by stepping motor (Resist) of the OKIFAX 1000.

2.2 Hopper Mechanism

The hopper automatically feeds the OKIFAX 1000 with the paper being set, single sheet at a time. When the paper is loaded in the paper cassette, it is then transported by the stepping motor, carrying forward only a single sheet caught by the brake shoe at a time.



3. PARTS REPLACEMENT

This section covers the procedures for the assembly, disassembly and installations in the field.
This section describes the disassembly procedures, and for assembly procedures, basically proceed with the disassembly procedures in the reverse order.

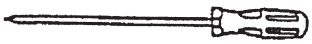
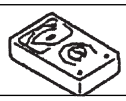
3.1 Precautions Concerning Parts Replacement

(1) Parts replacements must be carried out, by first turning the OKIFAX 1000 power switch off “O” and removing the High Capacity Second Paper Feeder from the OKIFAX 1000.
(2) Do not disassemble the High Capacity Paper Feeder if it is operating normally.
(3) Establish the extent of disassembly suitable for the purpose of the procedure, and do not disassemble any more than necessary.
(4) Only specified service tools may be used.
(5) Disassembly must be carried out according to the prescribed procedures. Parts may be damaged if such procedures are not followed.
(6) Small parts such as screws and collars can easily be lost, therefore these parts should be temporarily fixed in the original location.
(7) When handling printed circuit boards, do not use any glove which may generate static electricity.
(8) Do not place the printed circuit boards directly on the equipment or floor.

[Service Tools]

Table 3-1 shows the tools required for the replacement of printed circuit boards and units in the field.

Table 3-1 Service Tools

No.	Service Tools		Q' ty	Place of use	Remarks
1		No. 1-100 Philips screwdriver	1	2~2.5 mm screws	
2		No. 2-100 Philips screwdriver	1	3~5 mm screws	
3		No. 3-100 screwdriver	1		
4		No. 5-200 screwdriver	1		
5		Digital multimeter	1		
6		Pliers	1		
7		0.5 mm wrench	1		
8		Handy cleaner	1		

3.2 Parts Layout

This section describes the layout of the main components.

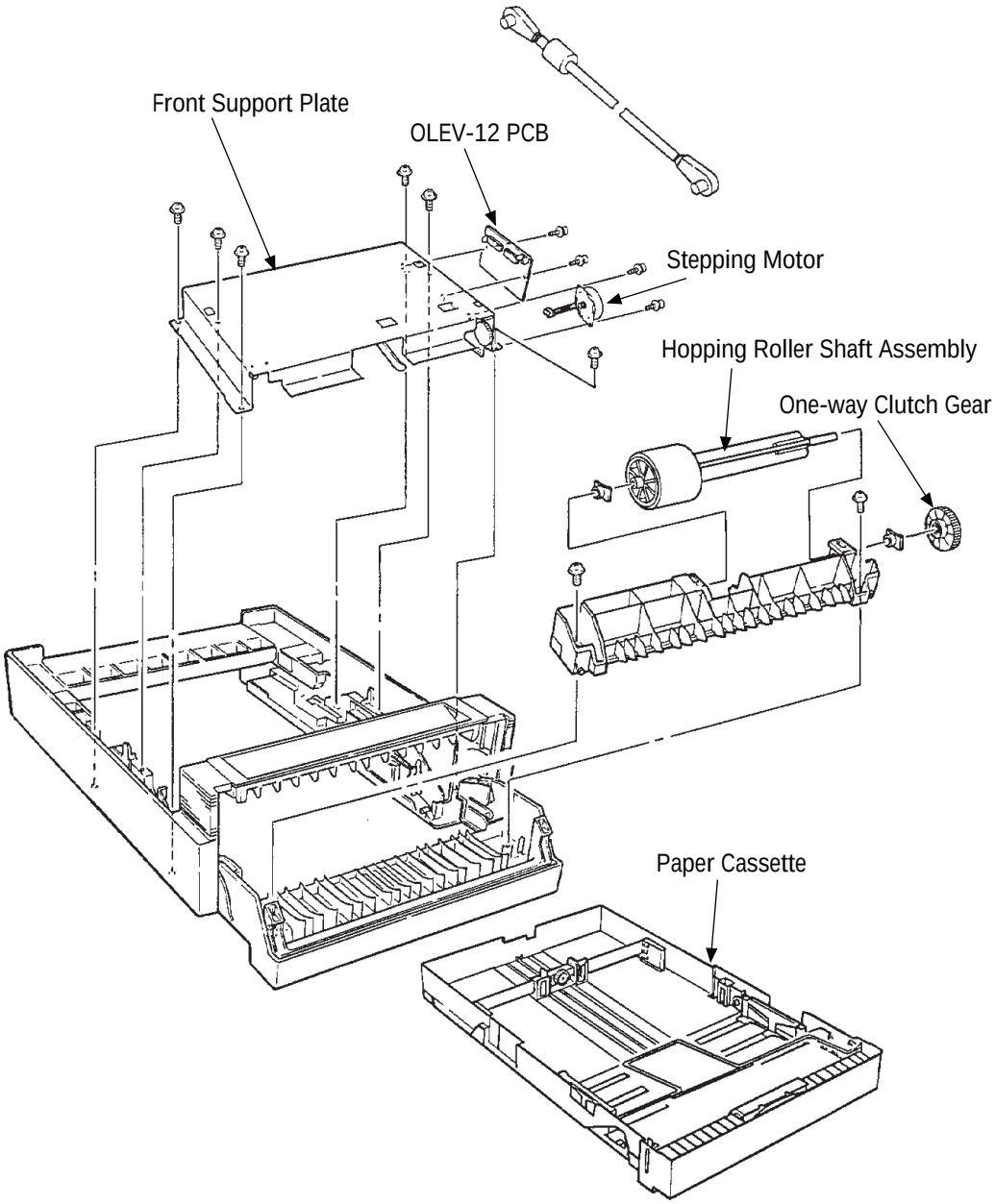
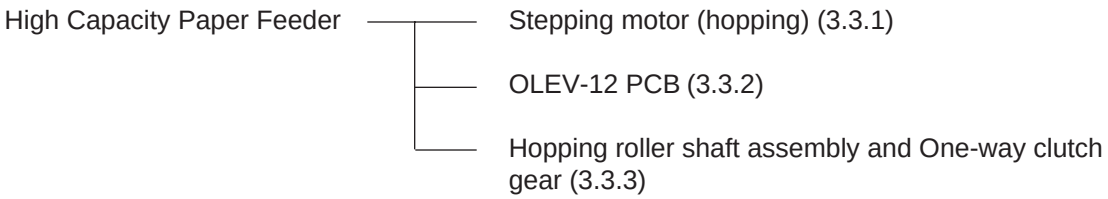


Fig. 3-1

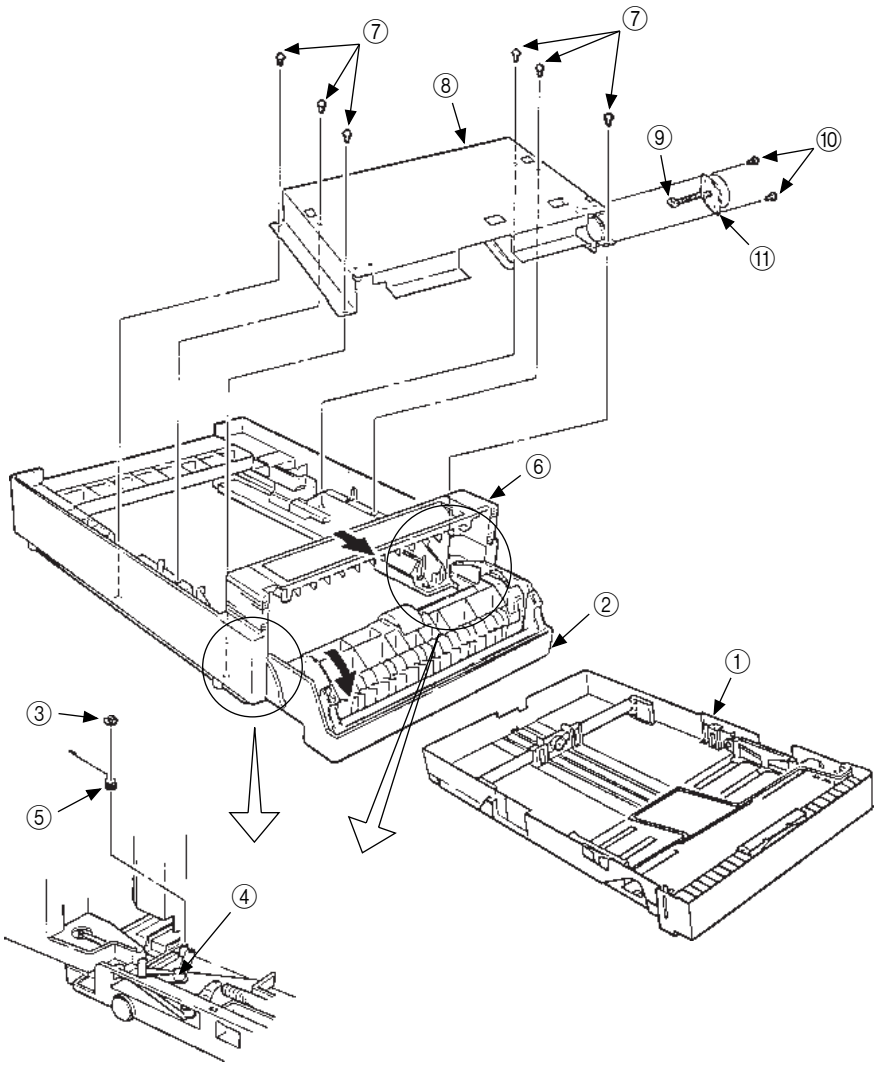
3.3 Parts Replacement Methods

This section describes the parts replacement methods for the components listed in the disassembly order diagram below.


High Capacity Paper Feeder
Stepping motor (hopping) (3.3.1)
OLEV-12 PCB (3.3.2)
Hopping roller shaft assembly and One-way clutch gear (3.3.3)

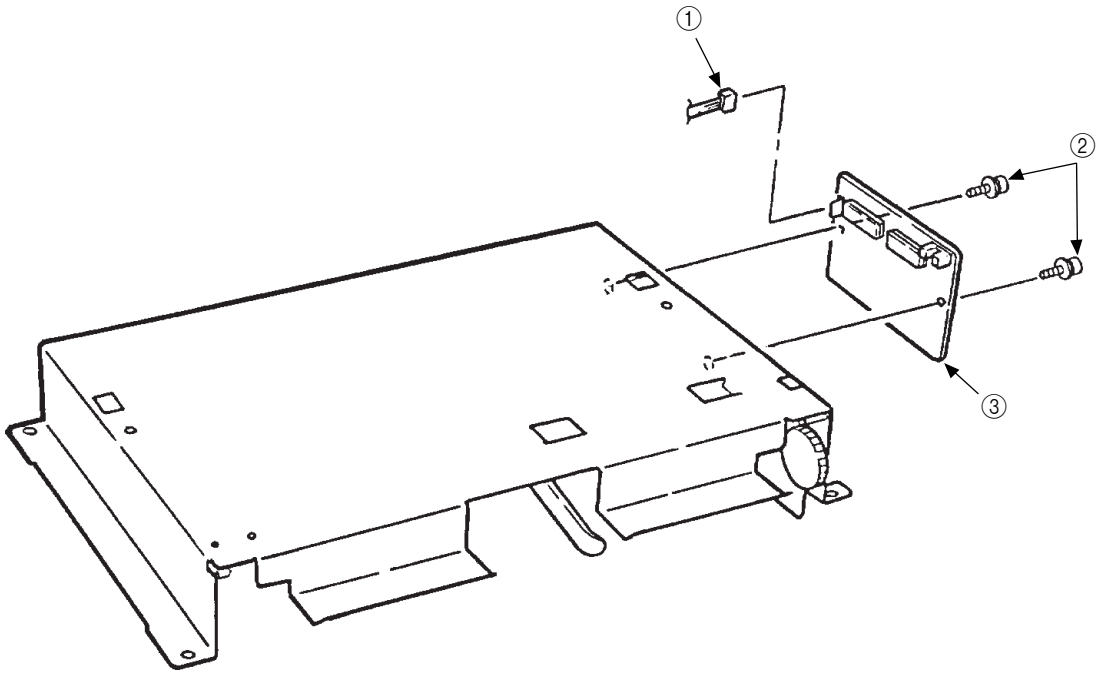
3.3.1 Stepping Motor (Hopping)

(1) Turn the OKIFAX 1000 power switch off "O" and remove the interface cable.
(2) Remove the paper cassette ①.
(3) Open the Front cover ②, stand the High Capacity Second Paper Feeder vertically and remove the 2 E-clamps ③.
(4) Remove the 2 levers ④, and remove the tension springs ⑤.
(5) Pull out the sheet guide ⑥ to the front.
(6) Remove the 6 screws ⑦, and remove the front support plate ⑧.
(7) Remove the connector ⑨ and the 2 screws ⑩, and remove the stepping motor ⑪.



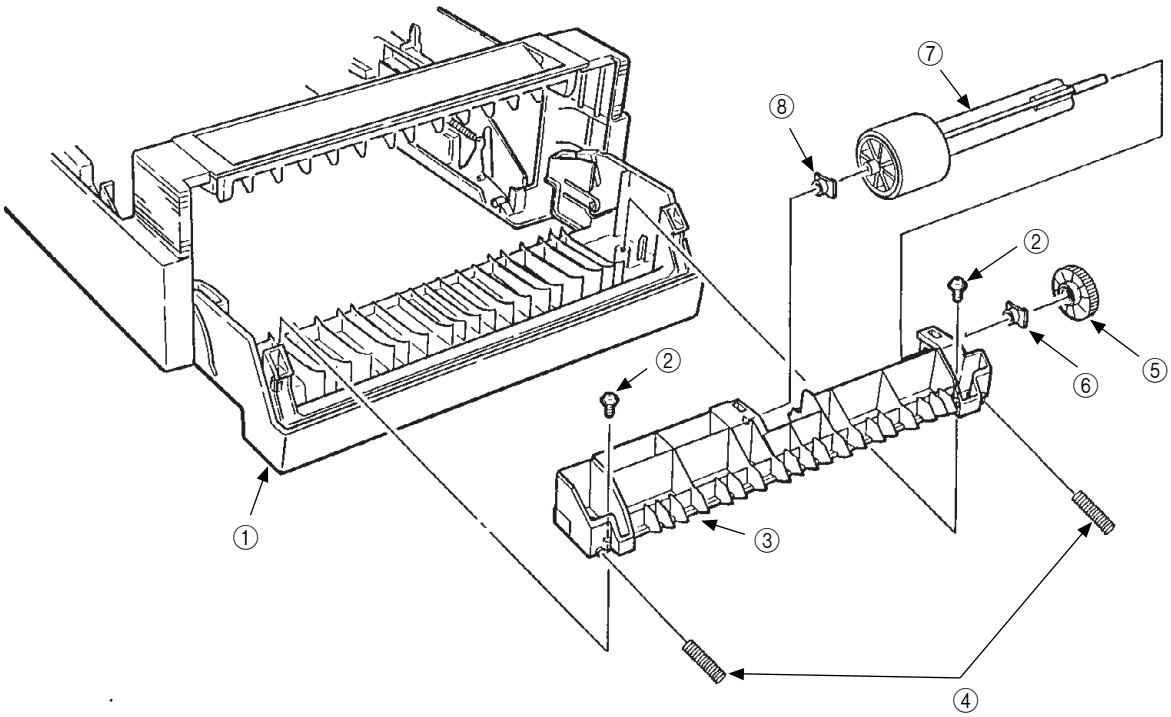
3.3.2 OLEV-12 PCB

(1) Remove the front support plate (see 3.3.1 steps (1) through (6)).
(2) Remove the connector ①, and the 2 screws ②, then remove the OLEV-12 PCB, ③.



3.3.3 Hopping Roller Shaft Assembly and One-way Clutch Gear

(1) Open the front cover ①.
(2) Remove the 2 screws ②, and remove the hopping roller frame (be careful not to lose the Springs ④ when you do this, since it comes off).
(3) Remove the One-way clutch gear ⑤.
(4) Remove the bush-A ⑥, and remove the hopping roller shaft assembly ⑦ (be careful not to lose the bush-B ⑧ when you do this, since it comes off).



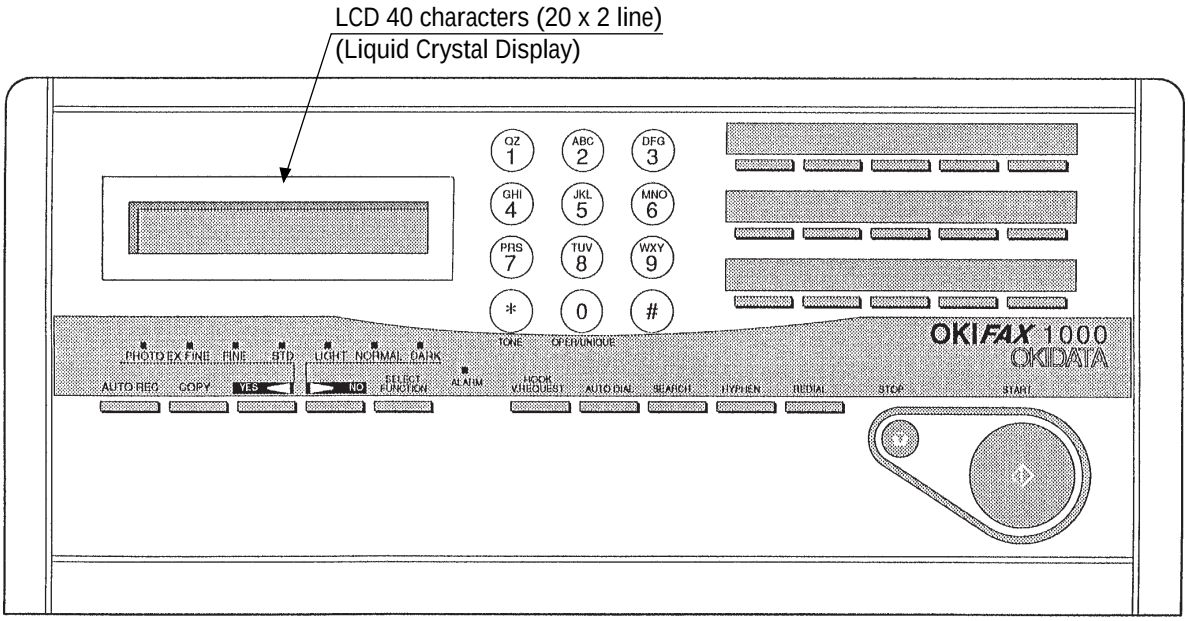
4. TROUBLESHOOTING

4.1 Precautions Prior to the Troubleshooting

(1) Go through the basic checking items provided in the Operator Guide.
(2) Obtain detailed information concerning the problem from the user.
(3) Go through the checking in the conditions similar to that in which the problem occurred.

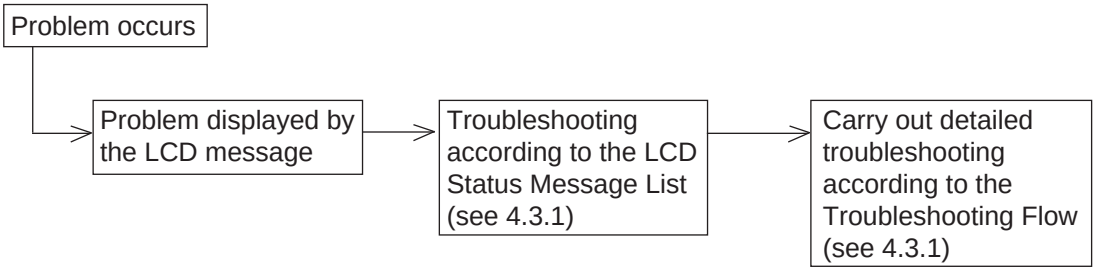
4.2 Preparations for the Troubleshooting

(1) Display on the Operator panel
The status of the problem is displayed on the LCD (Liquid Crystal Display) on the Operator panel. Go through the appropriate troubleshooting procedures according to the messages displayed on the LCD.



4.3 Troubleshooting Method

When a problem occurs, go through the troubleshooting according to the following procedure.


Problem occurs
Problem displayed by the LCD message
Troubleshooting according to the LCD Status Message List (see 4.3.1)
Carry out detailed troubleshooting according to the Troubleshooting Flow (see 4.3.1)

4.3.1 LCD Status Message List

The listing of the statuses and problems displayed in the form of messages on the LCD is provided in Table 4-1.

Table 4-1

Classification	LCD Status Message	Desctiption	Recovery method
Jam error	PAPER JAM CONFIRM AND "STOP"	Notifies of occurrence of jam while the paper is being fed from Hign Capacity Paper Feeder.	• Check the paper in the High Capacity Paper Feeder. Carry out the recovery printing by opening and closing the cover, and turn the error display off. • When the problem occurs frequently, to through the Troubleshooting.
Paper size error	PAPER JAM CONFIRM AND "STOP"	Notifies of incorrect size paper feeding from High Capacity Paper Feeder.	• Check the paper in the High Capacity Paper Feeder. Also check to see there was a feeding of multiple sheets. Carry out the recovery printing by opening and closing the cover, and turn the error display off.
Tray paper out	NO PAPER REPLACE PAPER	Notifies of no paper or paper cassette state of the High Capacity Feeder.	• Load the paper or paper cassette in High Capacity Paper Feeder.

• (JAM error)

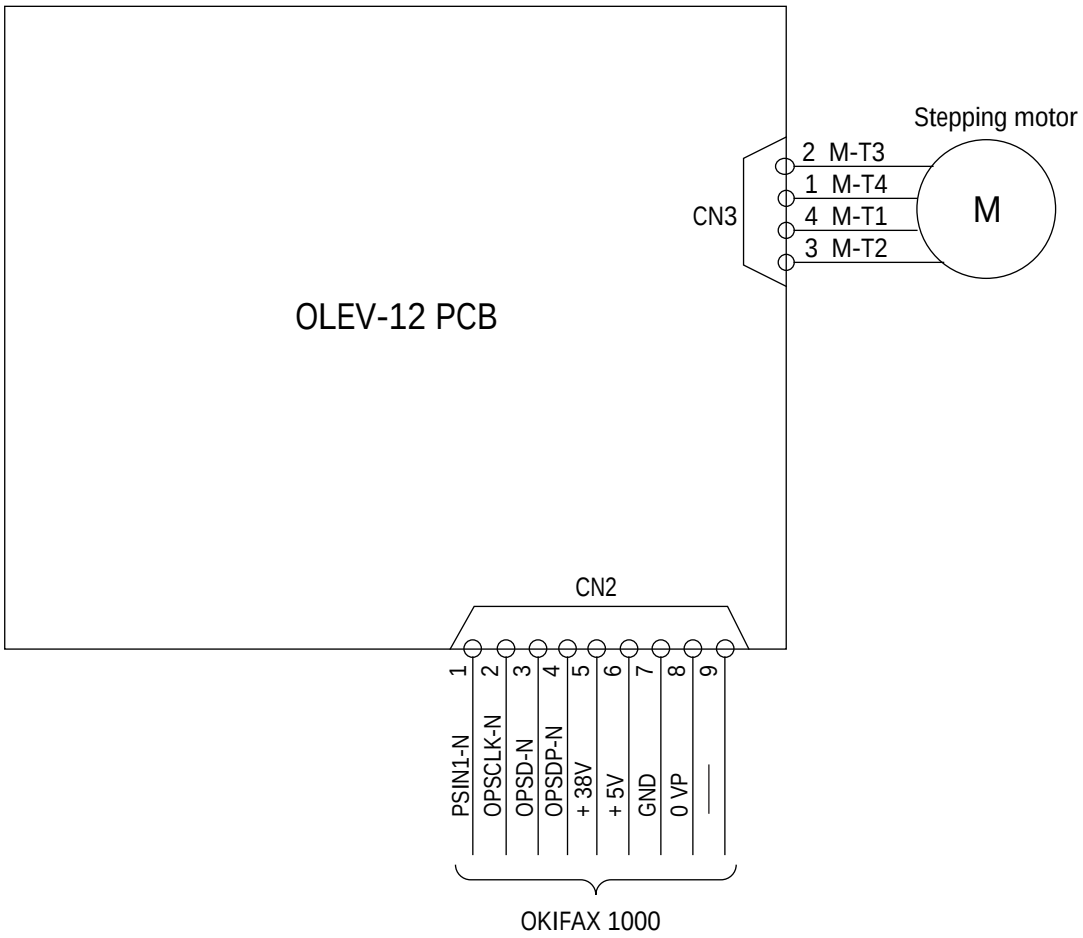
Paper Inlet Jam

- Does paper jam at the inlet when the power is turned on?
  - YES — Is the paper located above the sensor plate (Inlet)?
    - YES — Remove the paper.
  - NO — Is the sensor plate (Inlet) operating normally?
    - NO — Replace the sensor plate (Inlet).
  - YES — Replace the 2200- PT25 PCB or inlet sensor.
    Replace the 2400/2600- DFPU PCB or inlet sensor.
- NO — When the paper is fed in, does the paper inlet jam occur?
  - YES — Is the paper being fed to above sensor plate (Inlet)?
    - YES — Is the sensor plate (Inlet) operating normally?
      - NO — Replace the sensor plate. (Inlet)
    - YES — Clean the inlet sensor on the 2200- PT25 PCB or replace the 2200- PT25 PCB or inlet sensor.
      Clean the inlet sensor on the 2400/2600- DFPU PCB or replace the 2400/2600- DFPU PCB or inlet sensor.
  - NO — Replace the hopping roller assy or paper cassette.
- NO — Is the hopping roller shaft rotating?
  - YES — Set the paper properly.
- NO — Is the stepping motor turning?
  - YES — Replace the one-way clutch on the hopping roller assembly.
- NO — Is the connector cable being connected properly?
  - NO — Connect the connector cable properly.
- YES — Check the coil resistance (approx. 6.7 Ω) of the stepping motor.
  Is it normal?
  - NO — Replace the stepping motor.
- YES — Replace the DTRY PCB.

Note: Sensor Plate (Inlet) and PT25 PCB are the parts of the OKIFAX 2200.
Sensor Plate (Inlet) and DFPU PCB are the parts of the OKIFAX 2400/2600.

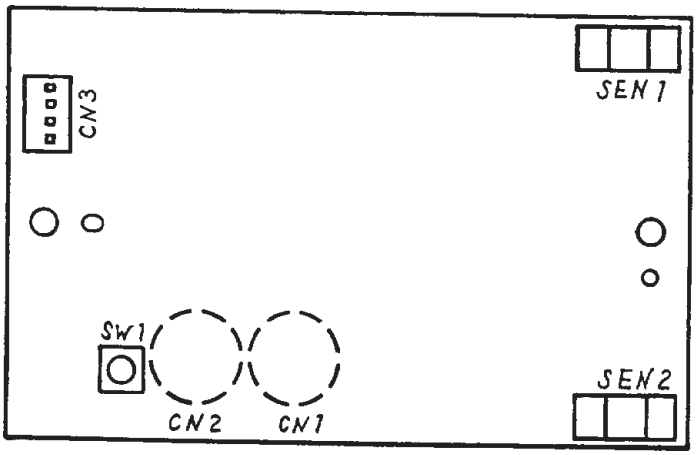
5. CONNECTION DIAGRAM

5.1 Interconnection Diagram



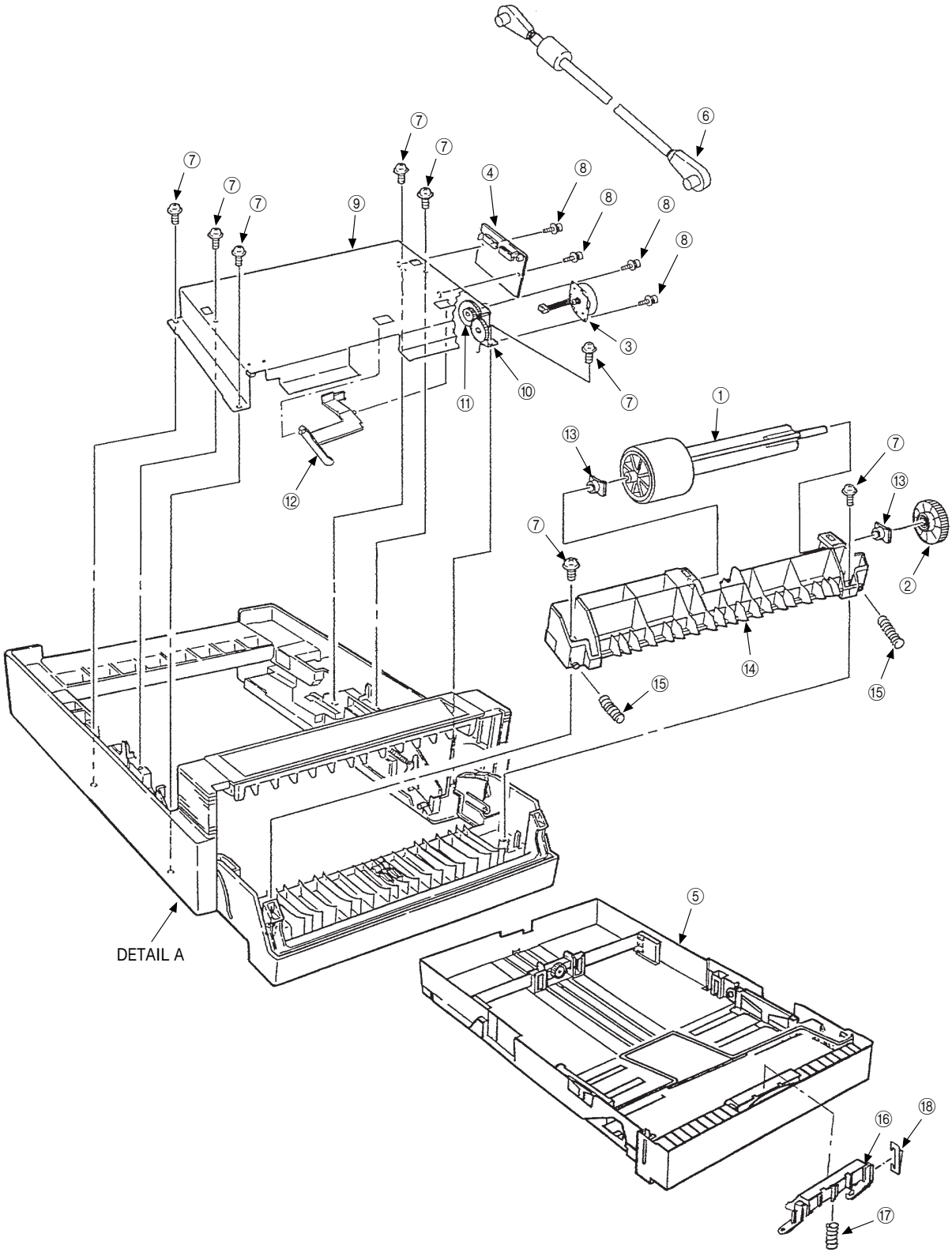
5.2 PCB Layout

OLEV-12 PCB



6. PARTS LIST

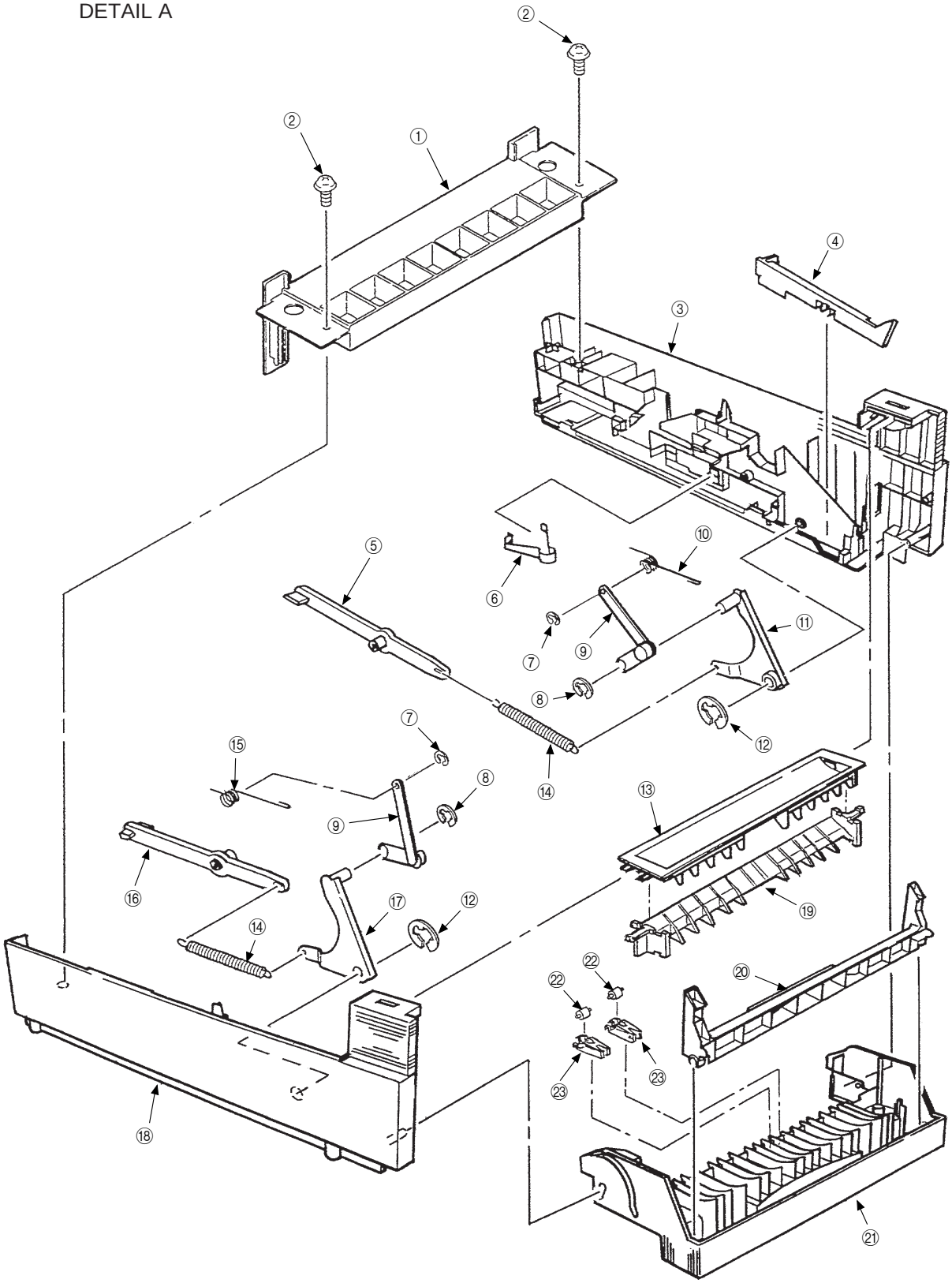
OKIDATA UST-250
CABINET ASSEMBLY



No.	OKI Parts Number	ODA Parts Number	Dexcription	Q'ty
1	3PA4083-6019G1		HOPPING ROLLER SHAFT ASS'Y	1
2	4PB4083-6024P1		ONE-WAY CLUTCH GEAR	1
3	4PB4083-6075P1		PULSE MOTOR	1
4	4YA4121-1014G12		P.W.A [OLEV-12]	1
5	1PA4083-5640G1		UNIVERSAL CASSETTE	1
6	3YS4011-3140P3		I/F CABLE	1
7	4PB4083-5670P2		TAPPING SCREW	8
8	4BP4013-3100P6		S-TIGHT TAPPING SCREW	4
9	3PP4083-5617G1		MOTOR BRACKET	1
10	4PP4083-5622P1		IDLE GEAR	1
11	4PP4083-2280P1		IDLE GEAR (C)	1
12	2PP4083-5636P1		SENSOR LEVER Paper End	1
13	4PP4083-6022P2		BEARING	2
14	1PP4083-5605P1		HOPPING ROLLER FRAME	1
15	4PB4083-5665P1		SPRING	2
16	3PP4083-5663G1		SEPARATION FRAME ASS'Y	1
17	4PP4083-6209P1		SPRING, Separation	1
18	4PP4083-6288P1		SPRING, Anti-Vibration	1

ISSUE	DATE	REMARKS ON REVISIONS	OKI		TITLE OKIDATA UST-250
1 2	02/28/94 03/30/94		DATE OF ISSUE	APPROVAL	TITLE CABINET ASSEMBLY
			CHECKED	DESIGNED	
TITLE: OKIDATA UST-250					DWG NO
				OKI electric industry co., ltd Japan	

OKIDATA UST-250
CABINET ASSEMBLY
DETAIL A



No.	OKI Parts Number	ODA Parts Number	Dexcription	Q'ty
1	1PP4083-5637P1		REAR SUPPORT FRAME	1
2	4PB4083-5670P2		TAPPING SCREW	2
3	1PP4083-5611P1		RIGHT SIDE FRAME	1
4	3PP4083-5615P1		SENSOR LEVER	1
5	3PP4083-5613P1		SLIDE CAM (R)	1
6	4PP4083-5655P1		SENSOR LEVER Cassette	1
7	RE2-SK		E-RING	2
8	RE5-SK		E-RING	2
9	4PP4083-5623G1		LOCK ARM	2
10	4PB4083-5660P1		SUPPORT SPRING (R)	1
11	4PP4083-5612G1		PLATE UP LEVER (R)	1
12	RE7-SK		E-RING	2
13	1PP4083-5653P1		SHEET GUIDE (U)	1
14	4PB4083-5614P1		PLATE UP SPRING	2
15	4PB4083-5661P1		SUPPORT SPRING (L)	1
16	3PP4083-5633P1		SLIDE CAM (L)	1
17	4PP4083-5632G1		PLATE UP LEVER (L)	1
18	1PP4083-5631P1		LEFT SIDE FRAME	1
19	1PP4083-5654P1		SHEET GUIDE (L)	1
20	1PP4083-5606P1		LOCK LEVER	1
21	1PP4083-5603P1		FRONT COVER	1
22	4PP4083-5609P1		BIAS ROLLER	2
23	4PP4083-5608P1		BIAS SPRING	2

ISSUE	DATE	REMARKS ON REVISIONS	OKI		TITLE OKIDATA UST-250
2	03/30/94		DATE OF ISSUE	APPROVAL	TITLE DATAIL A CABINET ASSEMBLY
			CHECKED	DESIGNED	
TITLE: OKIDATA UST-250					DWG NO
				OKI electric industry co., ltd Japan	